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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,457	03/04/2004	Juergen Brendel	SB-1	2456

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EXAMINER

VY, HUNG T

ART UNIT	PAPER NUMBER
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2163

DATE MAILED: 06/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/708,457	Applicant(s) BRENDL, JUERGEN	
	Examiner Hung T. Vy	Art Unit 2163	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
4a) Of the above claim(s) 16-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 10-15 is/are rejected.
- 7) ☒ Claim(s) 4-9 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 March 2004 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/4/04 & 10/05/04</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-15 and 18-20, drawn to a virtual network attached Storage (NAS) translator, classified in class 709, subclass 203.
 - II. Claims 1-17, drawn to a method for translating requests from a client for accessing files on a plurality of servers, classified in class 209, subclass 231.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product. See MPEP § 806.05(h). In the instant case, unpatentabilities of the group I invention would not necessarily imply unpatentability of the group II invention, since the device of the group I invention could be made by other and materially different processes from those of the group II invention, in claim 16, wherein comprising the combination name with a cryptographic hash function can be used to make different device.

2. a. Claims 1-15, drawn to a virtual network attached Storage (NAS) translator, classified in class 709, subclass 203.

b. Claims 18-20, drawn to a computer-program product, classified in class 709, subclass 203.

Inventions a and b are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the combination (group a) does not require concatenation means, receiving a file name and a directory handle from the remote client, for generating a combined name-handle as show in subcombination (group b). The subcombination has separate utility such as portable appliance.

Because these inventions are independent or distinct for the reasons given above and the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper.

During a telephone conversation with Stuart Aviner on 6/15/2006 a provisional election was made without traverse to prosecute the invention of group a, claims 1-15. Affirmation of this election must be made by applicant in replying to this Office action. Claims 16-20 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim

Art Unit: 2163

remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Summary of claims

3. Claims 1-20 are pending.

Claims 1-15 are rejected.

Claims 16-20 have been withdrawn for non-elected claims.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-2, and 11-13 are rejected under 35 U. S. C. § 102 (e) as being anticipated by Alshab et al. (U.S. pub. No. 2005/0138081).

Regarding claim 1, Alshab et al. discloses a virtual Network Attached Storage (NAS) translator comprising: a network interface that receives requests from clients, and receives server-data from a plurality of NAS appliance servers (see paragraph 0044 or paragraph 0088), each of the plurality of NAS appliance servers storing files and having a file system and a Net- work connection (See fig. 7 and paragraph 0045), wherein the server-data from the plurality of NAS appliance servers is carried over a network in network packets wherein the requests network in network from clients are carried over

Art Unit: 2163

the packets (see paragraph 0095), from clients are messages using a wherein the requests networked-file-protocol, the requests including initial requests that contain a file name and a directory-path locator (see paragraph 0088-0089), a hash engine (see fig. 8), receiving the file name and a directory- path locator from the network interface, the hash engine generating a hashed-name key having a fixed-length (see paragraph 0085), a translation table with a plurality of entries that each contain a storage key, file meta-data, and a unique identifier, the entries not storing the file name (see fig. 1 and 8-9); wherein the meta-data includes a server identifier that in the plurality of NAS indicates a server storing the file appliance servers (see fig. 1 and paragraph 0092), a comparator, receiving the hashed-name key and the storage key, for selecting a matching entry in the translation table, the matching entry having a storage key that matches the hashed-name key (see paragraph 0149-0150 and 0154-158); and a reply generator, receiving the unique identifier for the matching entry from the translation table, for generating a reply to the client that is sent through the network interface to the client, the reply containing a virtual file handle using the unique identifier (see fig. 1 and paragraph 0126) .

With respect to claim 2, Alshab et al. discloses the file name has a variable length (See paragraph 0148) and the hashed-name key and the store key are each fixed-length value (see paragraph 0137) having a same fixed length (See fig. 8-9).

With respect to claim 11, Alshab et al. discloses a server network connection (see fig. 4), a network-file layer that processes messages using the networked-file-protocol (see paragraph 0045), a file system having a native translation table that

receives native file handles and generates physical file addresses; a disk that stores files that are accessible by the physical file addresses (see paragraph 0088).

With respect to claims 12-13, Alshab discloses transport-control-protocol/internet Protocol (TCP/IP) layer (see paragraph 0090), coupled to the network connection and to the net- work-file layer, for extracting and encapsulating messages sent over the server network connection as net- work packets (see paragraph 0093).

6. Claims 1 and 10 are rejected under 35 U. S. C. § 102 (e) as being anticipated by Luke et al. (U.S. patent No. 6,985,956).

Regarding claim 1, Luke et al. discloses a virtual Network Attached Storage (NAS) translator comprising: a network interface (see column 8, line 1-15) that receives requests from clients, and receives server-data from a plurality of NAS appliance servers (1306-1310) (see fig. 13 or column 12, line 1-15), each of the plurality of NAS appliance servers storing files and having a file system (1312) and a Net- work connection (See fig. 12-13), wherein the server-data from the plurality of NAS appliance servers is carried over a network in network packets wherein the requests network in network from clients are carried over the packets (see column 14, line 5), from clients are messages using a wherein the requests networked-file-protocol, the requests including initial requests that contain a file name and a directory-path locator (see column 18, line 42-48), a hash engine (see fig. 25), receiving the file name and a directory- path locator from the network interface, the hash engine generating a hashed- name key, a translation table with a plurality of entries that each contain a storage key (see fig. 25), file meta-data, and a unique identifier, the entries not storing the file name

(see fig. 12); wherein the meta-data includes a server identifier that in the plurality of NAS indicates a server storing the file appliance servers (see fig. 12), a comparator, receiving the hashed-name key and the storage key, for selecting a matching entry in the translation table, the matching entry having a storage key that matches the hashed-name key (see column 24, line 45-68); and a reply generator, receiving the unique identifier for the matching entry from the translation table, for generating a reply to the client that is sent through the network interface to the client, the reply containing a virtual file handle using the unique identifier (see fig. 33) .

With respect to claim 10, Luke et al. discloses a counter that generates the unique identifier when a new entry is loaded into the translation table (see column 25, line 45-55).

Claim Rejections - 35 U.S.C. § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claim 3 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Alshab et al. (U.S. pub. No. 2005/0138081).

With respect to claim 3, Alshab et al. discloses all limitations of claimed invention recited in claim 2 except for the value of fixed length and variable length. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to have the same value of length, since it has been held that discovering an

Art Unit: 2163

optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

9. Claims 14-15 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Alshab et al. (U.S. pub. No. 2005/0138081) in view of Burch (U.S. Patent No. 6,308,320).

With respect to claims 14-15, Alshab et al. discloses all limitations of claimed invention recited in claim 13 except for the directory-path locator is a virtual file handle. However, Burch discloses the directory-path locator is a virtual file handle (see column 10, line 25-45). It would have been to one of ordinary skill in art at the time the invention was made to modify Alshab et al.'s the virtual NAS translator by providing the directory-path locator is a virtual file handle in order to have a efficient access to update the data transfer over network since such directory-path locator is virtual file handle has been well known in the art as evidenced by teaching of Burch (see column 10, line 25-45).

Allowable Subject Matter

10. Claims 4-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, since the prior art of record and considered pertinent to the applicant's disclosure does not teach or suggest the claimed the virtual NAS translator wherein requests from clients also include secondary request that contain the virtual file handle received by the client from the reply generator; further comprising: a secondary translator, receiving the virtual file handle from the client, the

Art Unit: 2163

secondary translator extracting a client unique identifier from the virtual file handle and searching the translation table for a matching entry that has the unique identifier matching the client unique identifier; and a request forwarder, whereby virtual file handles from clients are replaced with native file handles by the virtual NAS translator before being forwarded to the plurality of NAS appliances servers.

Conclusion

11. When responding to the office action, Applicants are advised to provide the examiner with the line numbers and page numbers in the application and/or references cited to assist the examiner to locate the appropriate paragraphs.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Vy whose telephone number is (571) 272-1954. The examiner can normally be reached on Monday-Friday 8:30 am - 5:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax numbers for the organization where this application or proceeding is assigned are (571) 273-8300 for regular communications and (703) 308-7722 for After Final communications.

Information regarding the status of an application may be obtained from the patent Application Information Retrieval (PAIR) system. Status information for published application may be obtained from either private Pair or Public Pair. Status information for unpublished applications is available through Private Pair only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have question on

Art Unit: 2163

access to the Private PAIR system, contact the Electronic Business Center (EBC) at
866-217-9197 (toll-free).

Hung T. Vy
Art Unit 2163
July 25, 2005.

A handwritten signature in black ink, appearing to read 'Tim Vo', is positioned above the printed name and title.

TIM VO
PRIMARY EXAMINER